

## MGMT

### MGMT CPU

This section contains the MGMT CPU (STM32F072BTx) and its associated peripherals. It includes a detailed power management block with a buck converter (U1), a memory interface (U3), and various control and status pins. Key components include the STM32F072BTx chip, U1, U3, and numerous resistors and capacitors.

### MGMT LED

This section shows the connection between the MGMT CPU and two external RGB LEDs (NH-B1515RGBA-HF). The circuit uses logic gates (D4, D5, D6) and resistors (R15, R20, R21, R23, R24, R25) to drive the LEDs through buffers (U1, U2).

### NET

### NET CPU

This section contains the NET CPU (STM32F072BTx) and its associated peripherals. It includes a detailed memory interface (U7), I2C bus connections, and various control and status pins. Key components include the STM32F072BTx chip, U7, and numerous resistors and capacitors.

### NET LED

This section shows the connection between the NET CPU and two external RGB LEDs (NH-B1515RGBA-HF). The circuit uses logic gates (D4, D5, D6) and resistors (R15, R20, R21, R23, R24, R25) to drive the LEDs through buffers (U1, U2).

## UI

### UI CPU

This section contains the UI CPU (STM32F072BTx) and its associated peripherals. It includes a detailed memory interface (U10), I2C bus connections, and various control and status pins. Key components include the STM32F072BTx chip, U10, and numerous resistors and capacitors.

### UI LED

This section shows the connection between the UI CPU and two external RGB LEDs (NH-B1515RGBA-HF). The circuit uses logic gates (D4, D5, D6) and resistors (R15, R20, R21, R23, R24, R25) to drive the LEDs through buffers (U1, U2).

### PTT

This section shows the connection between the UI CPU and a pushbutton switch (SW4). The circuit uses logic gates (D4, D5, D6) and resistors (R15, R20, R21, R23, R24, R25) to drive the switch through buffers (U1, U2).

### PTT to AI

This section shows the connection between the UI CPU and a pushbutton switch (SW5). The circuit uses logic gates (D4, D5, D6) and resistors (R15, R20, R21, R23, R24, R25) to drive the switch through buffers (U1, U2).

## USB

This section contains the USB port (J1) and its associated power management and control logic. It includes a buck converter (U1), a current sense resistor (R1), and various control and status pins. Key components include the USB port (J1), U1, and numerous resistors and capacitors.

### I2C BUS

### Mounting

This section shows the connection between the I2C bus and the mounting holes (H1-H4). It includes a detailed I2C bus interface (U6) and various control and status pins. Key components include the I2C bus interface (U6), and mounting holes (H1-H4).

## AUDIO

This section contains the audio jack (J3) and its associated power management and control logic. It includes a buck converter (U1), a current sense resistor (R1), and various control and status pins. Key components include the audio jack (J3), U1, and numerous resistors and capacitors.

## CONNECTORS

## DEBUG

This section shows the connection between the connectors and the debug ports. It includes a detailed connector interface (CN2) and various control and status pins. Key components include the connector interface (CN2), and various connectors (J1-J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31, J32, J33, J34, J35, J36, J37, J38, J39, J40, J41, J42, J43, J44, J45, J46, J47, J48, J49, J50, J51, J52, J53, J54, J55, J56, J57, J58, J59, J60, J61, J62, J63, J64, J65, J66, J67, J68, J69, J70, J71, J72, J73, J74, J75, J76, J77, J78, J79, J80, J81, J82, J83, J84, J85, J86, J87, J88, J89, J90, J91, J92, J93, J94, J95, J96, J97, J98, J99, J100, J101, J102, J103, J104, J105, J106, J107, J108, J109, J110, J111, J112, J113, J114, J115, J116, J117, J118, J119, J120, J121, J122, J123, J124, J125, J126, J127, J128, J129, J130, J131, J132, J133, J134, J135, J136, J137, J138, J139, J140, J141, J142, J143, J144, J145, J146, J147, J148, J149, J150, J151, J152, J153, J154, J155, J156, J157, J158, J159, J160, J161, J162, J163, J164, J165, J166, J167, J168, J169, J170, J171, J172, J173, J174, J175, 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